

ABSTRACT OF THE DISCLOSURE

A self-locking bolt assembly (1) includes a split bolt (2) and a screw set pin (3). The bolt includes a threaded shank (4), an axial bore (6) extending through the shank, the bore (6) including a threaded bore section (6A), a tapered end section (6C), and a bore midsection (6B) between the threaded bore section and the tapered end section. The screw set pin(3) includes a screw section (10B) having threads for engaging the threaded bore section (6A) and a pin shaft (10) having a tapered end section (10A) for engaging the tapered end section (6C) of the bore (6), the pin shaft (10) having a proximal end attached to the screw section (10B). The pin shaft (10) is sufficiently long to ensure that the screw set pin (3) further into the bore (6) without galling threads of the screw section (10B). The tapered end section (10A) of the pin shaft has a taper angle (α) that is less than a taper angle (β) of the tapered end section (6C) of the bore (6) to allow a narrowed end portion of the tapered end section (10A) of the pin shaft (10) to engage a narrowed end portion of the tapered end section (6C) of the bore (6).